TV SERVICING

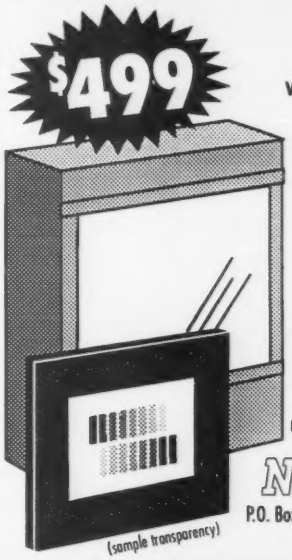
Installing satellite TV
by Joseph Pandolfo ..... Jul ... 8
Servicing IF video circuits
by Homer L. Davidson ..... Feb ... 8
Servicing directly coupled vertical circuits
by Homer L. Davidson ..... Jun ... 46
Servicing TV width and linearity problems
by Homer L. Davidson ..... Nov ... 20
TV servicing using an external power supply
by Homer L. Davidson ..... Jan ... 8
Understanding AGC Part I
by Lambert C. Huneault ..... Feb ... 22
Understanding AGC Part II
by Lambert C. Huneault ..... Apr ... 7
Understanding AGC Part III
by Lambert C. Huneault ..... Jun ... 22

VCR SERVICING

Diagnosing video head problems
by Victor Meeldijk ..... Jul ... 40
Servicing VCR servo problems
by Brian Phelps ..... Jun ... 14
VCR theory, troubleshooting
by Frank Thomas ..... Feb ... 13

ATTENTION CAMERA TECHS!

NOW MORE AFFORDABLE THAN EVER!



Model TR100 CB Camera Light Box with Transparencies

- (2) 3200°Kelvin Lamps (meets mfr. specs.)
- 7-Bar color transparency
- 11-step gray scale transparency
- Transparancies mounted in acrylic with optical scratch-resistant surface
- 1 year conditional guarantee
- Optional Transparencies Are Also Available

The method most manufacturers recommend

NUTRONIX, Inc.
P.O. Box 7103, Sterling Hts., MI 48078
(313)726-1278

Circle (10) on Reply Card

THE TEN MINUTE TREATMENT!

TEST / CLEAN / RESTORE CUSTOMER CRT's ON THE SPOT

BELTRON SYSTEM™ 2000

The Smart One

- ☐ **Fully Automatic.**
- ☐ **Microprocessor-Controlled** Test/Clean/Restore and Auto Sequences.
- ☐ **Simple and Safe** for use with Today's CRT Voltage Ratings.
- ☐ **Portable.** Fits in own Attache Case.
- ☐ **AC-Powered.**
- ☐ **Profitable.** Enhances any Service Offering.
- ☐ **Simplifies** CRT Replacement Scheduling.

To Order Call 800/626-6929
FAX: 415/568-1397
TEL: 415/568-5282

CONWAY MANUFACTURING, INC.

Circle (4) on Reply Card

Come Out of the Dark.

Highlight
your opportunity
to enrich your skills
at the 1992 National Professional
Electronics Convention, August 3-8,
Ft. Worth, TX. Programs will include:
*Technical training and certification.
*Management seminars and trade show.
*Register by January 31 to
$AVE UP TO $115 PER PERSON.
For a registration form and information, rush the following to NESDA:

Name_____
Business_____
Address_____
City_____ State_____
Zip_____
Phone_____

National Electronics Sales & Service Dealers Association
NESDA

2708 W. Berry St.
Ft. Worth, TX 76109
(817) 921-9061

1991 Department Index

	Month	Page
AUDIO CORNER		
Audio distortion	Aug	74
DAB: The future of radio	Dec	56
Digitial signal processing	Nov	57
Frequency response and tonal balance	Mar	54
HI-Z lines	Jan	53
How to boost Am reception	Jun	27
The importance of tape head azimuth	May	37
The many flavors of dB	Oct	49
The story behind biamp	Jul	26
What's midi	Sep	52
When switches go bad	Apr	56
Why we need loudness buttons	Feb	38
BOOKS		
Beginners guide to reading schematics by Rob J. Traister	Jun	64
Benchtop Electronics Reference Manual by F.C. Veley	Jan	50
Design and build electrical power supplies by Irving M Gottlieb	Jul	54
Easy electronic projects for the 556 dual timer by Delton T. Horn	Feb	51
Electrostatic discharge for electronics by Neil Sclater	Jun	64
Encyclopedia of electronic circuits volume 3 by Rudolph F. Graf	Feb	51
Fiber optic communications handbook by CSELT	Jan	50
Introduction to electronic devices and circuits by Robert T. Paytner	Jun	64
Lenk's audio handbook for operation and troubleshooting by John D. Lenk	May	53
Lenk's video handbook: Operation and troubleshooting by John D. Lenk	Jan	50
Mastering electronics by John Watson	Aug	63
Microcomputer LANS 2nd edition by Mike Hordeski	Jan	50
Microwave oven repair by Homer L. Davidson	Aug	63
Modern spectrum analyzer theory and applications by Morris Engelson	May	53
Neural networks and fuzzy systems by Dr. Bart Kosko	Oct	53
Op-amp circuits and principles by H.M. Berlin	Aug	63
RS-232 made easy: 2nd edition single source to connecting computer equipment by Martin D. Seyer	Jul	54
Surface mount devices troubleshooting and repair by David L. Helserman	May	53
The illustrated dictionary of electronics by Rufus P. Turner	April	58
The master IC cookbook 2nd edition by Calvin Hallmark	April	58
Tips and techniques for the electronics hobbyist by Gordon McComb	April	58
Troubleshooting and repairing VCRs 2nd edition by Gordon McComb	Jul	54
Understanding digital troubleshooting 3rd edition by Don L. Cannon	Aug	63
Using solid state electronics 5th edition by Don L. Cannon	Oct	53
BUSINESS CORNER		
Base pricing on your cost of doing business	Feb	6
Have an advertising audit, have an advertising plan	Mar	55
Honing your business skills	Jun	11
Keeping your business healthy in a sick economy	Nov	11
Making the most of your yellow pages ad	Oct	44
Manage your personal finances carefully	Sep	48
Plan now for a successful 91	Jan	5
Surviving hard times	Apr	50
Turn customer complaints into profits	May	21
Understanding turnover and service level	Dec	5
COMPUTER CORNER		
A little extra	May	58
A couple of servicing tips	Nov	50
Beware when adding new equipment	Mar	50
DOS path command	Jan	49
DOS problems	Jun	45
Hard disk space	Apr	18
Learn about popular software	Jul	48
Repairing microcomputer keyboards	Oct	41
RS-232 communications chip tester	Sep	56
Special slots in the PC	Feb	57
Understanding turner and service level	Dec	5
TECHNOLOGY/TROUBLESHOOTING TIPS		
Set ID: Sylvania RA J147 chassis 13A304, SAMS 2760	Jun	58
Tension mask high-resolution color display provides bright, high-contrast, high-color fidelity picture	Jul	50
Tiny semiconductors can be massed produced	Apr	49
World's fastest high-capacity memory chip	May	51
VIDEO CORNER		
A little about computer monitors	Jul	52
A glossary of television terms	Sep	41

	Month	Page
Causing a VCR to operate without a cassette in it	Jan	51
Is the all-digital simulcast HDTV system the television of the future?	Feb	52
Movable video heads provide noiseless speech search	Aug	70
Solving problems with close captions on a VCR	Dec	52
Tape trouble sensors	May	51
The LCD projection system	Mar	56
WHAT DO YOU KNOW ABOUT ELECTRONICS?		
Don't be mislead by dB voltage gain	Jun	46
What errors in Test Your Electronics Knowledge?	Jul	56
Fine tuning resistor theory	Dec	50
Full moon syndrome	Sep	50
Graphical analysis of capacitor characteristics	Jan	46
More about magnetic flux	Feb	48
The final corrections	Apr	52
Talking to microprocessors and computers	May	48

WATCH FOR

BUSINESS CORNER

ELECTRONIC Servicing & Technology

This *exclusive* monthly column will show you how to run your service operation more efficiently and profitably.

You'll learn about

- building customer satisfaction
- writing service contracts
- marketing your services
- hiring technicians.

SCHEMATICS

HP LASERJET PRINTERS

LASERJET-1 ..... $250 LASERJET-2 ..... $250

PS/2 SYSTEM BOARDS

8530 ..... $125 8560 ..... $175
8530-286 ..... $175 8570-16M $225
8550 ..... $175 8580-20M $225
8550-Z $200

PS/2 DISPLAYS

8503 ..... $65 8513-23 ..... $75
8512-23 ..... $75 8513-72 ..... $75
8512-72 ..... $75

TERMINAL DISPLAYS

3179 ..... $95 3191 ..... $125

EAGAN TECHNICAL SERVICES, INC.

1380 Corporate Center Curve • Eagan, MN 55121
PH. (612) 688-0098

Call for a free sample of our work . . .

PS/2 is a registered trademark of International Business Machines Corporation
HP and Laserjet are registered trademarks of Hewlett Packard Corporation

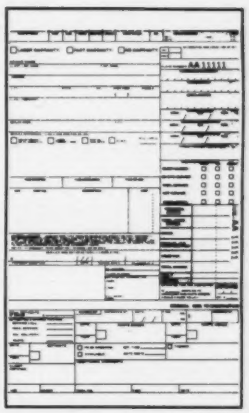
Circle (5) on Reply Card

Improve Your Form.

3-Part A continuous feed form used for customer c.o.d. service or parts/accessory sales receipts (N3CN). Not for warranty billing. Computer generated software to be available soon.

5-Part Available in snapout (N5SN) or continuous feed (N5CN). Matching fields with N3SN, except for customer estimate and receipts. For warranty billing.

7-Part A universal snapout form (N7SN) designed for both customer service c.o.d. and manufacturer warranty billing. Complies fully with the requirements of state and local ordinances, including California.



Discounts

Carbonless NESDA Forms are available to NESDA members at additional savings. For pricing information and samples, or information regarding other NESDA membership benefits, write to NESDA, 2708 W. Berry St., Ft. Worth, TX 76109; or call (817) 921-9061.

The NESDA Form

NESDA, 2708 W. Berry St.
Fort Worth TX 76109
Phone: (817) 921-9061

1991 Profax directory

Monthly index – 1982-1991

	Profax Number
October 1982	
NEC color video monitor, chassis Z7A	2000
RCA B&W TV, chassis KCS207B	2001
NAP color TV, chassis 09C201 CQ4X	2002
November 1982	
Hitachi color TV, chassis NP80SX	2003
RCA color TV, chassis CTC115	2004
NEC video projector, chassis W2A-1	2005
December 1982	
NAP B&W TV model MQA014GY (w/radio)	2006
RCA color TV, chassis CTC108	2007
January 1983	
Hitachi color TV GTX, chassis No. 615	2008
RCA projection TV model PGR200/300	2009
Magnavox B&W TV, chassis 09M101	2010
February 1983	
Hitachi color TV, NP9X chassis	2011
RCA color TV, CTC118 series	2012
March 1983	
RCA B&W TV, chassis KCS206C (ac/dc/battery)	2013
Hitachi projection color TV, CT 5011	2014
April	
GE color TV, AC-D AC-E	2015
NAP B&W TV, AM/FM radio UVG-12016	
May 1983	
NAP color TV, chassis E34-18, -19, -32, -33	2017
GE B&W TV, XE chassis	2018
June 1983	
RCA color TV, CTC117 series	2019
NAP B&W TV, model B386QWA01	2020
July 1983	
Magnavox color TV, chassis E31-38	2021
Philco color TV, chassis K-20	2022
August 1983	
GE color TV, EM chassis	2023
NAP B&W TV, chassis 12M101	2024
September 1983	
RCA color TV, chassis CTC120	2025
NAP B&W TV, chassis 12M101	2026
October 1983	
RCA B&W TV, KCS205 series	2027
GE color TV, PM-A chassis	2028
November 1983	
RCA B&W TV, KCS204 series	2029
NAP color TV, 13C3 series	2030
December	
NAP color TV, 19C3 series	2031
GE color TV, PC-B chassis	2032
January 1984	
RCA KCS206 B&W	2033
NAP E34 chassis	2034
February 1984	
NAP 19C2 chassis	2035
RCA KCS213 B&W	2036
March 1984	
GE AF/C chassis	2037
April 1984	
GE GL/X chassis	2038
GE XK B&W chassis	2039
NAP E32 chassis	2040
May 1984	
RCA CTC111 series	2041
June 1984	
GE XJ B&W chassis	2042
NAP E32-58, -59 chassis	2043
July 1984	
GE EC/K chassis	2044
NAP K10 chassis	2045
August 1984	
RCA CTC123 series	2046
NAP RD425SI & RXC192SL chassis	2047
September 1984	
NAP E53-45, -46 ,-47, -48 chassis	2048
GE XE B&W chassis	2049
October 1984	
RCA CTC132/132 series	2050
November 1984	
GE AB/AC chassis	2051
NAP BD 3911 SL01 B&W chassis	2052
December 1984	
RCA KCS B&W AM/FM/clock	2053
Hitachi NP81X chassis	2054
January 1985	
GE CM chassis	2055
NEC C13-304A chassis	2056
GE XM-E chassis	2057
February 1985	
GE PC-A chassis	2058
Hitachi CT2516 chassis	2059

1991 Profax Directory

March 1985	Profax Number
GE GK chassis	2060
Hitachi CQ4X chassis	2061
April 1985	
RCA CTC117 chassis	2062
NAP UXC chassis	2063
May 1985	
GE EC-A chassis	2064
NEC DJ-60EN(R) chassis	2065
June 1985	
GE EP-B chassis	2066
July 1985	
GE 19PC-F/H chassis	2067
August 1985	
GE PM-B chassis	2068
September 1985	
NAP EC-31-52, -56 & -58 chassis	2069
RCA CTC118 chassis	2070
October 1985	
NAP E-34-18, -32 & -33 chassis	
RCA CTC121 chassis	2072
November 1985	
GE BC-N chassis	2073
GE EP chassis	2074
December 1985	
GE PC-J chassis	2075
RCA CTC126 chassis	2076
January 1986	
RCA MMC 100, video monitor	2077
GE PM-A chassis	2078
February 1986	
GE BC-A chassis	2079
RCA 117 chassis	2080
March 1986	
RCA CTC133 chassis	2081
April 1986	
GE 25 PC(J) chassis	2082
RCA CTC120 chassis	2083
May 1986	
GE HP chassis, tuning & control systems	2084A
GE HP chassis, chroma	2084B
June 1986	
RCA CTC125 chassis	2085
RCA 207 series weather clock	2086
July 1986	
GE NF chassis	2087
GE PM-C chassis	2088
August 1986	
RCA CTC136 chassis	2089
September 1986	
RCA CTC130-S1 chassis	2090

October 1986	Profax Number
GE X110 chassis, B&W TV	2091
GE TV/AM/FM clock radio	2092
November 1986	
RCA B&W TV basic service data, UVM chassis	2093
GE 14-inch portable color TV, RS-A chassis	2094
December 1986	
GE X110 chassis (cont.)	2095
RCA UWJ chassis	2096
January 1987	
GE color TV, MK-2 chassis	2097
February 1987	
RCA color TV supplement, CTC117-S2	2098
GE color TV, MK-1 chassis	2099
April 1987	
Hitachi color TV, CT2250B, CT2250W chassis	3000
May 1987	
RCA color TV, VDM140 chassis	3002
GE color TV, NF chassis update	3003
GE 5-inch B&W TV, 7-7130A chassis	3004
June 1987	
Hitachi color TV, CT1358 chassis	3005
RCA color TV, CTC135 chassis	3006
July 1987 Zenith color TV, D13085/D1910B chassis	3007
GE color TV, MK-1 chassis, model 8-1938	3008
August 1987	
Zenith color TV, D2500W chassis	3009
Hitachi color TV, CT2020W, CT2020B chassis	3010
September 1987	
Zenith color TV, SD2501W chassis	3011
Hitachi color TV, CT2250B, CT2250W chassis	3012
October 1987	
RCA color TV, CTC134 chassis	3013
November 1987	
GE color TV, CTC140 chassis	3014
December 1987	
Hitachi color TV, chassis CT0911	3015
Zenith color TV, chassis SD2097S	3016
January 1988	
Zenith PV800 color monitor	3017
Hitachi color TV, CT1358 chassis	3018
February 1988	
GE VCR, 1VCR2018W model	3019
March 1988	
GE 8-4500 projection TV	3020
April 1988	
NAP projection TV, E54-10 chassis	3021
Zenith color TV, C2020H chassis	3022
May 1988	
RCA PVM050 color TV	3023
Hitachi CT2652, CT2653 color TVs	3024

1991 Profax Directory

Profax Number

June 1988
Hitachi color TVs, CT2647/CT2648/CT2649 chassis . . 3025
NAP projection TV, E54-15 chassis 3026

July 1988
GE model 1VCR2006W VCR 3027
Zenith color TV, CM-139/B-0 (B) chassis 3028

August 1988
Hitachi color TV, CT1344 chassis 3029
NAP color TV, E51-56 chassis 3030

September 1988
RCA color TV, PVM035 chassis 3031
GE color TV, NC-05X3/06X1 chassis 3032

October 1988
Hitachi CT3020W/CT3020B color TV 3033
Zenith CM-139/B-3 (I) SD2511G/SD2581H color TV . 3034

November 1988
Hitachi VHS VCR, model VT-63A 3035
NAP RD4502SL/RLC312SL color TV monitors 3036

December 1988
GE projection TV, PW chassis, model 40PW3000KA013037

January 1989
Hitachi color TV, CT1955, NP85XA chassis 3038
NAP color TV, series 19C2 chassis (Magnavox) 3039

February 1989
RCA/GE color TV, CTC145/146 chassis 3040
Zenith color TV, CM-140/b-2(G) chassis 3041
(models SE2503G/SE2505P, SE2507N/SE2509H)

March 1989
NAP color TV, chassis E34-11 3042
Hitachi color TV, chassis CT1941/CT19A2, NP83X chassis 3043

April 1989
GE VHS VCR, model 1VCR2002X 3044
Hitachi CT1955 color TV 3045

May 1989
Zenith CM-14-0/B-3(1) color TV 3046
(models SE2721H/SE2725R/SE2727H)
GE color TV, 1987 CTC136 3047

June 1989
RCA P42000-S1 projection TV 3048
(additional models: RVM46700, 46GW700, P46000)
NAP color TV, chassis E54-15 3049
(Magnavox RD8518 and RD8520; Philco model P8190S; Sylvania PSC410 and PSC420)

July 1989
Hitachi CT2066 color TV 3050
RCA CTC135 color TV 3051

August 1989
GE CTC135-S1 color TV 3052
Zenith CM-140/B-2(I) color TV 3053

September 1989
RCA CSM055 color TV/AM/FM/clock radio 3054

Profax Number

October 1989
Hitachi CT2086 B/W chassis G7NU3 color TV 3055
Zenith PV4661H rear-projector color TV 3056

November 1989
GE 1987 8-4500 projection color TV 3057
RCA/GE CTC145/146 color TV 3058

December 1989
ZENITH CM-140/DIGITAL(C) chassis color TV 3059
(Models SE3135P/SE3191H/SE3535H/ZB2771H/ZB2771H2/ZB2777H/ZB2777H2/ZB2797P/ZB2797P2/ZB2797Y/ZB2797Y2/ZB3193H/ZB3193Y/ZB3539T/ZB3539Y)

January 1990
Hitachi CT1395W G7NSU2 color TV 3060

February 1990
Zenith CM-139/B1 (Y) and (K) Color TV Recievers . . . 3061
Models SD2097S (Y) and SD1327W3, SD1327Y, SD1327Y3(K)

March 1990
RCA/GE CTC148/149-S2 chassis color TV 3062

April 1990
Hitachi G7XU2/3 chassis color TV 3063
G7XU2 - models CT2087B/W, A087 (MT2870 through MT2878) G7XU3 - models CT2088B/W, A088 (MT2880, MT2886, MT2887)

May 1990
Zenith PV-140/Digital (G) Rear Proj. digital TV 3064
receiver, Zenith surround stereo system

June 1990
Hitachi CT4580K, VP7X2 chassis projection TV 3065

July 1990
Zenith PV454-1P chassis color TV 3066

August 1990
RCA/GE TX81 chassis color TV 3067

September 1990
RCA/GE CTC156 chassis color TV 3068

October 1990
Hitachi VP9X1 chassis color TV 3069

November 1990
RCA/GE CTC169 (PV) chassis Color TV 3070

December 1990
RCA CTC91 chassis color TV 3071

January 1991
RCA CTC99 chassis color TV 3072

February 1991
RCA CTC107 chassis color TV 3073

March 1991
RCA/GE CTC168 chassis color TV 3074

April 1991
RCA/GE CTC86 chassis color TV 3075

1991 Profax Directory

	Profax Number
May 1991	
RCA/GE KCS203 chassis B&W TV	3076
June 1991	
RCA CTC96 chassis color TV	3077
July 1991	
RCA CTC107 chassis color TV	3078
August 1991	
Hitachi CT1947/CT19A7 chassis color TV	3079
September 1991	
Hitachi CT2541/2542 chassis color TV	3080
October 1991	
RCA/GE CTC167 chassis color TV	3081
November 1991	
RCA/GE CTC166 chassis color TV	3082
December 1991	
RCA/GE CTC169 chassis color TV	3083

Profax number index — 1982-1991

Profax Number	Month	Year
2000-2002	Oct	82
2003-2005	Nov	82
2006-2007	Dec	82
008-2010	Jan	83
2011-2012	Feb	83
2013-2014	Mar	83
2015-2016	Apr	83
2017-2018	May	83
2019-2020	Jun	83
2021-2022	Jul	83
2023-2024	Aug	83
2025-2026	Sep	83
2027-2028	Oct	83
2029-2030	Nov	83
2031-2032	Dec	83
2033-2034	Jan	84
2035-2036	Feb	84
2037	Mar	84
2038-2040	Apr	84
2041	May	84
2042-2043	Jun	84
2044-2045	Jul	84
2046-2047	Aug	84
2048-2049	Sep	84
2050	Oct	84
2051-2052	Nov	84
2053-2054	Dec	84
2055-2057	Jan	85
2058-2059	Feb	85
2060-2061	Mar	85
2062-2063	Apr	85
2064-2065	May	85
2066	Jun	85
2067	Jul	85
2068	Aug	85
2069-2070	Sep	85
2071-2072	Oct	85
2073-2074	Nov	85
2075-2076	Dec	85
2077-2078	Jan	86
2079-2080	Feb	86
2081	Mar	86
2082-2083	Apr	86
2084A-2084B	May	86
2085-2086	Jun	86
2087-2088	Jul	86
2089	Aug	86
2090	Sep	86
2091-2092	Oct	86
2093-2094	Nov	86
2095-2096	Dec	86
2097	Jan	87
2098-2099	Feb	87
(Note: numbers 2100-2999 were skipped)		
3007	Apr	87
3002-3003	May	87
3005-3006	Jun	87
3007-3008	Jul	87
3009-3010	Aug	87
3011-3012	Sep	87
3013	Oct	87
3014	Nov	87
3015-3016	Dec	87
3017-3018	Jan	88
3019	Feb	88
3020	Mar	88
3021-3022	Apr	88
3023-3024	May	88
3025-3026	Jun	88
3027-3028	Jul	88
3029-3030	Aug	88
3031-3032	Sep	88
3033-3034	Oct	88
3035-3036	Nov	88
3037	Dec	88
3038-3039	Jan	89
3040-3041	Feb	89
3042-3043	Mar	89
3044-3045	Apr	89
3046-3047	May	89
3048-3049	Jun	89
3050-3051	Jul	89
3052-3053	Aug	89
3054	Sep	89
3055-3056	Oct	89
3057-3058	Nov	89
3059	Dec	89
3060	Jan	90
3061	Feb	90
3062	Mar	90
3063	Apr	90
3064	May	90
3065	Jun	90
3066	Jul	90
3067	Aug	90
3068	Sep	90
3069	Oct	90
3070	Nov	90
3071	Dec	90
3072	Jan	91
3073	Feb	91
3074	Mar	91

Profax Number	Month	Year
3075	Apr	91
3076	May	91
3077	Jun	91
3078	Jul	91
3079	Aug	91
3080	Sep	91
3081	Oct	91
3082	Nov	91
3083	Dec	91

Company Index - 1982 - 1991

	Profax Number	Month and year
GENERAL ELECTRIC		
Color TV, AC-D AC-E	2015	Apr 83
B&W TV, XE chassis	2018	May 83
Color TV, EM chassis	2023	Aug 83
Color TV, PM-A chassis	2028	Oct 83
Color TV, PC-B chassis	2832	Dec 83
AF/C chassis	2037	Mar 84
GL/X chassis	2038	Apr 84
XK B&W chassis	2039	Apr 84
XJ B&W chassis	2042	Jun 84
EC/K chassis	2044	Jul 84
XE B&W chassis	2049	Sep 84
AB/AC chassis	2051	Nov 84
CM chassis	2055	Jan 85
XM-E chassis	2057	Jan 85
PC-A chassis	2058	Feb 85
GK chassis	2060	Mar 85
EC-A chassis	2064	May 85
EP-B chassis	2066	Jun 85
19PC-F/H chassis	2067	Jul 85
PM-B chassis	2068	Aug 85
BC-N chassis	2073	Nov 85
EP chassis	2074	Nov 85
PC-J chassis	2075	Dec 85
PM-A chassis	2078	Jan 86
BC-A chassis	2079	Feb 86
25 PC(J) chassis	2082	Apr 86
HP chassis, tuning and control systems	2084A	May 86
HP chassis, chroma	2084B	May 86
NF chassis	2087	Jul 86
PM-C chassis	2088	Jul 86
X110 chassis, B&W TV	2091	Oct 86
TV/AM/FM clock radio	2092	Oct 86
14-inch portable color TV	2094	Nov 86
X110 chassis (cont.)	2095	Dec 86
CTC140 chassis, color TV	3014	Nov 87
MK-1 chassis, model 8-1938	3008	Jul 87
MK-1 chassis	2099	Feb 87
MK-2 chassis	2097	Jan 87
NF chassis update, color TV	3003	May 87
7-7130A chassis, 5-inch B&W	3004	May 87
1VCR2006W model, VCR	3027	Jul 88
1VCR2018W model, VCR	3019	Feb 88
NC-05X3/06X1 chassis, color TV	3032	Sep 88
Projection TV 8-4500	3020	Mar 88
PW chassis, model 40PW3000KA01 projection TV	3037	Dec 88
VHS VCR, model 1VCR2002X	3044	Apr 89
Color TV, 1987 CTC136	3047	May 89
CTC135-S1 color TV	3052	Aug 89
1987 8-4500 projection color TV	3057	Nov 89
HITACHI		
Color TV, chassis NP80SX	2003	Nov 82
Color TV, GTX chassis No. 615	2008	Jan 83
Color TV, NP9X chassis	2011	Feb 83
Projection color TV, CT5011	2014	Mar 83
NP81X chassis	2054	Dec 84
CT2516 chassis	2059	Feb 85
CQ4X chassis	2061	Mar 85
CT1358 chassis, color TV	3005	Jun 87
CT2020W, CT2020B chassis	3010	Aug 87
CT2250B, CT2250W chassis	3000	Apr 87
CT2250B, CT2250W chassis	3012	Sep 87
CT1344 chassis color TV	3029	Aug 88
CT1358 chassis color TV	3018	Jan 88
CT2647/CT2648/CT2649 chassis color TVs	3025	Jun 88
CT2652, CT2653 color TVs	3024	May 88
CT3020W/CT3020B	3033	Oct 88
VHS VCR, model VT-63A	3035	Nov 88
CT1955 color TV, NP85XA chassis	3038	Jan 89
Color TV, chassis CT1941/CT19A2, NP83X chassis	3043	Mar 89
CT1955 color TV	3045	Apr 89
CT2066 color TV	3050	Jul 89
CT2086 B/W chassis G7NU3 color TV	3055	Oct 89
CT1395W G7NSU2 color TV	3060	Jan 90
G7XU2/3 chassis color TV	3063	Apr 90
G7XU2 - models CT2087B/W, A087(MT2870 through MT2878)		
G7XU3 - models CT2088B/W, A088(MT2880, MT2886, MT2887)		
CT4580K, VP7X2 chassis proj. TV	3065	Jun 90
VP9X1 chassis color TV	3069	Oct 90
CT1947/CT19A7 chassis color TV	3079	Aug 91
CT2541/2542 chassis color TV	3080	Sep 91
MAGNAVOX		
B&W TV chassis 09M101	2010	Jan 83
Color TV, chassis E31-38	2021	Jul 83
NAP		
Color TV, chassis 09C201 CQ4X	2002	Oct 82
B&W TV, model MQA014GY (w/radio)	2006	Dec 82
B&W TV, AM/FM radio UVG-1	2016	Apr 83
Color TV, chassis E34-18, -19, -32, -33	2017	May 83
B&W TV, model B386QWA01	2020	Jun 83
B&W TV, chassis 12M101	2024	Aug 83
B&W TV, chassis 12M101 (duplicate)	2026	Sep 83
Color TV, 13C3 series	2030	Nov 83
Color TV, 19C3 series	2031	Dec 83
E34 chassis	2034	Jan 84
19C2 chassis	2035	Feb 84
E32 chassis	2040	Apr 84
E32-58, -59 chassis	2043	Jun 84
K10 chassis	2045	Jul 84
RD 425S1 & RXC 192SL chassis	2047	Aug 84
E53-45, -46, -47, -48 chassis	2048	Sep 84
BD3911 SL01 B&W chassis	2051	Nov 84
UXC chassis	2063	Apr 85
EC-31-52, -56 & -58 chassis	2069	Sep 85
E-34-18, -32 & -33 chassis	2071	Oct 85
E51-56 chassis, color TV	3030	Aug 88

1991 Profax Directory

	Profax Number	Month and year
E54-10 chassis, projection TV	3021	Apr 88
E54-15 chassis, projection TV	3026	Jun 88
RD4502SL/RLC312SL color TV monitors	3036	Nov 88
Color TV, series 19C2 chassis (Magnavox)	3039	Jan 89
Color TV, chassis E34-11	3042	Mar 89
Color TV, chassis E54-15	3049	Jun 89
(Magnavox RD8518 and RD8520; Philco model P8190S; Sylvania PSC410 and PSC420)		
NEC		
Color video monitor, chassis Z7A	2000	Oct 82
Video projector, chassis W2A-1	2005	Nov 82
C13-304A chassis	2056	Jan 85
J-60EN(R) chassis	2065	May 85
PHILCO		
Color TV, chassis K-20	2022	Jul 83
RCA		
B&W TV, chassis KCS207B	2001	Oct 82
Color TV, chassis CTC115	2004	Nov 82
Color TV, chassis CTC108	2007	Dec 82
Projection TV, model PGR200/300	2009	Jan 83
Color TV, CTC118 series	2012	Feb 83
B&W TV, chassis KCS 206C	2013	Mar 83
Color TV, CTC117 series	2019	Jun 83
Color TV, chassis CTC120	2025	Sep 83
B&W TV KCS205 series	2027	Oct 83
B&W TV KCS204 series	2029	Nov 83
KCS206 B&W	2033	Jan 84
KCS213 B&W	2036	Feb 84
CTC111 series	2041	Mar 84
CTC123 series	2046	Apr 84
CTC131/132 series	2050	Oct 84
KCS B&W AM/FM clock	2053	Dec 84
CTC117 chassis	2062	Apr 85
CTC118 chassis	2070	Sep 85
CTC121 chassis	2072	Oct 85
CTC126 chassis	2076	Dec 85
MMC100, video monitor	2077	Jan 86
CTC117 chassis	2080	Feb 86
CTC133 chassis	2081	Mar 86
CTC120 chassis	2083	Apr 86
CTC125 chassis	2085	Jun 86
207 series weather clock	2086	Jun 86
CTC136 chassis	2089	Aug 86
CTC130-S1 chassis	2090	Sep 86
B&W TV basic service data	2093	Nov 86
UWJ chassis	2096	Dec 86
CTC117-S2 color TV supplement	2098	Feb 87
CTC134 chassis, color TV	3013	Oct 87
CTC135 chassis, color TV	3006	Jun 87
VDM140 chassis, color TV	3002	May 87
PVM035 chassis color TV	3031	Sep 88
PVM050 color TV	3023	May 88
P42000-S1 projection TV	3048	Jun 89
(additional models: RVM46700, 46GW700, P46000) CTC135 color TV	3051	Jul 89
CSM055 color TV/AM/FM/clock radio	3054	Sep 89
CTC91 chassis color TV	3071	Dec 90
CTC99 chassis color TV	3072	Jan 91
CTC107 chassis color TV	3073	Feb 91
CTC96 chassis color TV	3077	Jun 91
CTC107 chassis color TV	3078	Jul 91
RCA/GE		
Color TV, CTC145/146 chassis	3040	Feb 89
CTC145/146 color TV	3058	Nov 89
CTC148/149-S2 chassis color TV	3062	Mar 90
TX81 chassis color TV	3067	Aug 90
CTC156 chassis color TV	3068	Sep 90
CTC169 (PV) chassis Color TV	3070	Nov 90
CTC168 chassis color TV	3074	Mar 91
CTC86 chassis color TV	3075	Apr 91
KCS203 chassis B&W TV	3076	May 91
CTC167 chassis color TV3081	Oct 91	
CTC166 chassis color TV	3082	Nov 91
CTC169 chassis color TV	3083	Dec 91
ZENITH		
D2500W chassis, color TV	3009	Aug 87
D13085/D1910B chassis, color TV	3007	Jul 87
SD2501W chassis, color TV	3011	Sep 87
CM-139/B-0 (B) chassis color TV	3028	Jul 88
CM-139/B-3 (I) SD2511G/SD2581H	3034	Oct 88
C2020H chassis color TV	3022	Apr 88
PV800 color monitor	3017	Jan 88
Color TV, CM-140/b-2(G) chassis	3041	Feb 89
CM-14-0/B-3(1) color TV	3046	May 89
(models SE2721H/SE2725R/SE2727H)		
CM-140/B-2(I) color TV	3053	Aug 89
PV4661H rear-projector color TV	3056	Oct 89
CM-140/DIGITAL(C) chassis color TV	3059	Dec 89
(Models SE3135P/SE3191H/SE3535H/ ZB2771H/ZB2771H2/ZB2777H/ZB2777H2/ ZB2797P/ZB2797P2/ZB2797Y/ZB2797Y2/ ZB3193H/ZB3193Y/ ZB3539T/ZB3539Y)		
CM-139/B1 (Y) and (K) Color TV Recievers	3061	Feb 90
Models SD2097S (Y) and SD1327W3, SD1327Y, SD1327Y3(K) PV-140/Digital (G) Rear Proj. digital TV	3064	May 90
receiver, Zenith surround stereo system		
PV454-1P chassis color TV	3066	Jul 90

WATCH FOR

BUSINESS CORNER

ELECTRONIC Servicing & Technology

This *exclusive* monthly column will show you how to run your service operation more efficiently and profitably.

You'll learn about

- building customer satisfaction
- writing service contracts
- marketing your services
- hiring technicians.